

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes a new Fig. 5 showing a double-sided cylinder. Support for this figure can be found in the English translation of the original specification at page 3, third paragraph, for example.

Attachment: New Sheet (Fig. 5)

REMARKS

Applicants submit this Amendment and Response to respond to the Office Action dated December 26, 2007. Claims 19, 23, 25-28, 36, 40, 42-45, 53, 56, and 58-61 have been amended without intending to abandon or to dedicate to the public any patentable subject matter. Accordingly, Claims 19-68 are currently pending in the application.

(I) Claim Objections

Claims 19, 23, 36, 40, 53, and 56 were objected to because they contained various informalities. Each of these claims have been amended per the Examiner's suggestion to remove the identified informalities. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objections to Claims 19, 23, 36, 40, 53, and 56.

Applicants note with appreciation the Examiner's indication that Claims 23, 24, 40, 41, 56, and 57 are allowable but for their dependence from a rejected claim. Claims 23, 40, and 56 have been amended into independent form including all of the limitations of their respective base claim. Accordingly, Claims 23, 24, 40, 41, 56, and 57 appear to be in condition for allowance.

(II) Claim Rejections under 35 U.S.C. §112

Claims 25-28, 36, 42-45, and 58-61 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. These claims have been amended to remove the aspects found to be indefinite. Accordingly, Applicants respectfully request reconsideration and withdrawal of the §112(2) rejections to Claims 25-28, 36, 42-45, and 58-61.

(III) Claim Rejections under 35 U.S.C. §102 and §103

Claims 19-22, 25-29, 35-39, 42-46, 52-55, 58-62, and 68 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,865,916 to Goldman [hereinafter "Goldman"]. In order for a rejection under 35 U.S.C. §102 to be proper, each and every element as set forth in a

claim must be found, either expressly or inherently described, in a single prior art reference. (MPEP §2131). However, all of the claim limitations set forth in the pending claims cannot be found in Goldman.

Claims 30-34, 47-51, and 63-67 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Goldman in view of U.S. Patent No. 5,010,750 to Buser et al. [hereinafter "Buser"]. In order for a rejection under 35 U.S.C. §103 to be proper, clear articulation of the reason(s) why the claimed invention would have been obvious should be stated by the Examiner and must be supported by some rationale which may include one of the following: A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) "Obvious to try" - choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art; or (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. The Supreme Court recently noted in *KSR v. Teleflex* that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. (MPEP §2143). The Examiner has not, however, identified the rationale which supports the conclusion that the pending claims are unpatentable over Goldman in view of Buser. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

More specifically, Applicants respectfully submit that neither Goldman nor Buser teach, suggest, or make obvious at least the following italicized features of the rejected independent claims:

19. An electromechanical lock cylinder that cooperates with evaluation electronics to recognize access authorization, comprising:

a housing that includes two opposite cylindrical receptacles, in which either a lock core, which can be operated by a key, or a knob shaft, which is connected to rotate in unison with a knob, are mounted to rotate, in which the lock cores or knob shafts cooperate with a lock tab, which operates, in particular, a bolt or a latch of a door lock, and, with a fitting key or access authorization, an electromechanically driven blocking or coupling element is moved from a rest position to an operating position and produces a splined connection between the key or knob and the lock tab, *whereas the lock tab, in the rest position of the blocking or coupling element, is freely rotatable relative to the two lock cores or the two knob shafts, wherein the blocking or coupling element is arranged on or in the lock core or on or in the knob shaft and rotates with it, and includes an eccentric, which moves a driver back and forth between the rest position and the operating position, in which it engages in a recess of the lock tab or rotary sleeve, on which the lock tab is arranged.*

36. An electromechanical lock cylinder, which cooperates with an evaluation electronics to recognize access authorization, comprising:

a housing that includes two opposite cylindrical receptacles, in which, on one side of the housing, a lock core, which can be operated by a key, and, on the opposite side, a knob shaft, which is connected to rotate in unison with a knob, are mounted to rotate, in which the lock core and/or knob shaft cooperate with a lock tab, and especially operate a bolt or latch of a door lock, and with a fitting key and/or access authorization, an electromechanically driven blocking or coupling element is moved from a rest position to an operating position and produces a splined connection between the key and/or knob and the lock tab, *whereas the lock tab, in the rest position of the blocking or coupling element, is freely rotatable relative to the lock core and the knob shaft, wherein the blocking or coupling element is arranged on or in the lock core or on or in the knob shaft and rotates with it, and also includes an eccentric, which moves a driver back and forth between the rest position and the operating position, in which it engages in a recess of the lock tab or a rotary sleeve, on which the lock tab is arranged.*

53. An electromechanical lock cylinder, which cooperates with evaluation electronics to recognize an access authorization, comprising:

a housing, which includes a cylindrical receptacle, in which either a lock core, which can be operated by a key, or a knob shaft, which is connected to rotate in unison with a knob, is mounted to rotate, in which the lock core or the knob shaft cooperate with a lock tab, which operates, in particular, a bolt or latch of a door lock, and, with a fitting key and/or access authorization, electromechanically driven blocking or coupling element is moved from a rest position to an operating position and produces a splined connection between the key or knob and the lock tab, *whereas the lock tab, in the rest position of the blocking or coupling element, is freely rotatable relative to the lock core or to the knob shaft, wherein the blocking or coupling element is arranged on or in the lock core or on or in the knob shaft and rotates with it, and also includes an eccentric, which moves a driver back and forth between the rest position and the operating position, in which it engages in a recess of the lock tab or a rotary sleeve, on which the lock tab is arranged.*

The present invention, in certain embodiments, provides an electromechanical drive for a locking pin within the lock core or the knob shaft respectively. The drive comprises an eccentric which moves the locking pin between a rest position and an operating position. This eccentric may be driven by an electric motor device. The motor device turns together with the lock core or knob shaft respectively. The use of an electric motor drive has the advantage to be better controllable (left or right turn) and comprises a low current consumption (see page 5, third paragraph and page 4, last paragraph, of the English text). The prior art does not disclose such an arrangement of an eccentric.

Goldman

Goldman describes a locking cylinder which can be operated with an electromagnetic device. There is neither a motor nor an eccentric disclosed in Goldman. The cap 64 (see Fig. 3A of Goldman) is not an electromagnetically driven eccentric as stated by the Examiner. The driving means for the cap 64 includes an electromagnetic means and not a motor that turns an eccentric. This particular fact leaves the lock of Goldman susceptible to attacks whereby an attacker introduces an appropriate magnet to the knob of the lock. This may result in the pin being driven into the engaged position without actually presenting an appropriate credential/key.

Additionally, this cap 64 appears to be a plate which can be to-and-from movable in the axial direction of the locking core (see column 2, lines 39-43 and Figs. 2 and 3A of Goldman) in order to effect an engaging position of the clutch. Furthermore, the driving means of Goldman are located within the knob and not within or on the locking core or knob shaft respectively. This means that if a proper axial force is applied to the knob (*e.g.*, via a hammer or the like), the knob may be engaged and illicit access may be granted to a secure area. The present invention, on the other hand, provides that the electromechanical drive for the locking pin are in the lock core of the knob shaft.

Yet another difference is that the lock tab 20 of Goldman is integral to one part of the locking core. It cannot rotate independently of the knob shaft or lock core as claimed in the currently pending independent claims.

It appears as though this particular prior art document is identical and has the same drawbacks of the prior art patent discussed at page 2 of the original specification. Embodiments of the present invention address such drawbacks.


Buser

Buser discloses a locking cylinder with an electromagnetic locking mechanism. The driving means are located in the housing of the cylinder and not in the lock core or knob shaft respectively. Further, there is no eccentric provided. Buser is primarily relied upon to show that the use of sensors in locks are known. Buser, however, does not overcome the other shortcomings of Goldman in that Buser does not teach, suggest, or make obvious providing an electromechanically driven locking pin that resides on or in the lock core or the knob shaft. Also, Buser does not show that the lock tab can rotate independently of the knob shaft or lock core. Notwithstanding all of these shortcomings, the Examiner has further failed to show how one skilled in the art would modify Goldman with Buser to teach any of the currently pending claims. This is also due to the fact that Neither Goldman nor Buser teach or suggest all of the elements of the claimed invention. Accordingly, Applicants respectfully submit that the currently pending claims are allowable in view of Goldman and Buser.

Based upon the foregoing, Applicant believes that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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By: 
Matthew R. Ellsworth
Registration No. 56,345
SHERIDAN ROSS P.C.
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700